

Form 1449 (Modified)

applemental Information Disclosure **Statement By Applicant**

(Use Several Sheets if Necessary)

Atty Docket No.

UCALP020

Application No.:

10/750,533

Applicant: Richard A. Mathies, et al.

Filing Date

Group

December 29, 2003

1744

U.S. Patent Documents

Examiner						Sub-	Filing
Initial	No.	Patent No.	Date	Patentee	Class	class	Date
	A1	5,587,128	12/1996	Wilding et al.			
	A2	6,521,188	02/18/03	Webster			
	A3	6,786,708	09/07/04	Brown et al.			
	A4	2001/0014091	01/2004	Duck et al.			
	A5	2002/0098097	07/25/02	Singh			
	A6	2004/0053290	03/18/04	Terbrueggen et al.			
	A7	2004/0151629	08/05/04	Pease et al.			

Foreign Patent or Published Foreign Patent Application

Examiner		Document	Publication	Country or		Sub-	Trans	lation
Initial	No.	No.	Date	Patent Office	Class	class	Yes	No
	B1	WO 00/40712	07/2000	PCT				
	B2							

Other Documents

		Table 1988		
Examiner				
Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication		
	C1	Waller et al. "Quantitative Immunocapture PCR Assay for Detection of		
		Campylobacter jejuni in Foods,: Applied and Environmental Microbiology,		
		September 2000, Vol. 66, No. 9, pp. 4115-4118.		
	C2	Soper, S.A., D.C. Williams, Y. Xu, S.J. Lassiter, Y. Zhang, S.M. Ford, and R.C.		
		Bruch, Sanger DNA sequencing reactions performed in a solid-phase nanoreactor		
		directly coupled to capillary gel electrophoresis. Anal. Chem., 1998. 70: p. 4036-		
		4043.		
	C3	Hultman, T., S. Bergh, T. Moks, and M. Uhlén, Bidirectional solid-phase sequencing		
		of in vitro-amplified plasmid DNA. BioTechniques, 1991. 10: p. 84-93.		
	C4	, , , , , , , , , , , , , , , , , , , ,		
		single-molecule PCR of DNA with a homo-priming sequence using a single primer		
		and hot-startable DNA polymerase. Journal of Bioscience and Bioengineering, 2000.		
		90(4): p. 456-458.		
Examiner		Date Considered		

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Other Documents

		Other Documents		
Examiner				
Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication		
	C5	Mitra, R.D., V.L. Butty, J. Shendure, B.R. Williams, D.E. Housman, and G.M.		
		Church, Digital genotyping and haplotyping with polymerase colonies. Proceedings		
		of the National Academy of Sciences of the United States of America, 2003. 100(10):		
	ļ	p. 5926-5931.		
	C6	Dressman, D., H. Yan, G. Traverso, K.W. Kinzler, and B. Vogelstein, Transforming		
		single DNA molecules into fluorescent magnetic particles for detection and		
		enumeration of genetic variations. Proceedings of the National Academy of Sciences of the United States of America, 2003. 100(15): p. 8817-8822.		
	C7	Brenner, S., et al., Gene expression analysis by massively parallel signature		
	0/	sequencing (MPSS) on microbead arrays. Nature Biotechnology, 2000. 18(6): p. 630-		
		634.		
	C8	Liu, S., Y. Shi, W.W. Ja, and R.A. Mathies, Optimization of high-speed DNA		
		sequencing on microfabricated capillary electrophoresis channels. Anal. Chem.,		
		1999. 71: p. 566-573.		
	C9	Leamon, J.H., W.L. Lee, K.R. Tartaro, J.R. Lanza, G.J. Sarkis, A.D. deWinder, J.		
. 1		Berka, and K.L. Lohman, A massively parallel Pico Titer Plate (TM) based platform		
	1	for discrete picoliter-scale polymerase chain reactions. Electrophoresis, 2003. 24: p.		
	1010	3769-3777.		
	C10	Ghadessy, F.J., J.L. Ong, and P. Holliger, Directed evolution of polymerase function by compartmentalized self-replication. PNAS, 2001. 98: p. 4552-4557.		
	C11	Rye, H.S., M.A. Quesada, K. Peck, R.A. Mathies, and A.N. Glazer, High-sensitivity		
		two-color detection of double-stranded DNA with a confocal fluorescence gel		
		scanner using ethidium homodimer and thiazole orange. Nucleic Acids Res., 1991.		
		19: p. 327-333.		
	C12			
		coupled to long-read direct sequencing: an approach for mutation detection in genes with compact genomic structures. Journal of Biochemical and Biophysical Methods,		
		2001. 47(1-2): p. 131-136.		
	C13	Blazej, R.G., B.M. Paegel, and R.A. Mathies, <i>Polymorphism ratio sequencing: A new</i>		
		approach for single nucleotide polymorphism discovery and genotyping. Genome		
		Research, 2003. 13: p. 287-293.		
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(Use Several Sheets if Necessary)	December 29, 2003	1744

Other Documents

Examiner					
Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication			
	C14	Kamei, T., B.M. Paegel, J.R. Scherer, A.M. Skelley, R.A. Street, and R.A. Mathies, Integrated Hydrogenated Amorphous Si Photodiode Detector for Microfluidic Bioanalytical Devices. Analytical Chemistry, 2003. 75: p. 5300-5305.			
	C15	Simpson, P.C., A.T. Woolley, and R.A. Mathies, <i>Microfabrication technology for the production of capillary array electrophoresis chips</i> . Biomedical Microdevices, 1998. 1(1): p. 7-26.			
	C16	Paegel, B.M., C.A. Emrich, G.J. Wedemayer, J.R. Scherer, and R.A. Mathies, <i>High-throughput DNA sequencing with a 96-Lane capillary array electrophoresis bioprocessor</i> . Proceedings of the National Academy of Science, U.S.A., 2002. 99: p. 574-579.			
	C17	Albarghouthi, M.N., B.A. Buchholz, P.J. Huiberts, T.M. Stein, and A.E. Barron, Poly-N-hydroxyethylacrylamide (polyDuramide): A novel hydrophilic self-coating polymer matrix for DNA sequencing by capillary electrophroesis. Electrophoresis, 2002. 23: p. 1429-1440.			
	C18	Kan, C.W., E.A.S. Doherty, and A.E. Barron, A novel thermogelling matrix for microchannel DNA sequencing based on poly-N-alkoxyalkylacrylamide copolymers. Electrophoresis, 2003. 24(24): p. 4161-4169.			
	C19	Doherty, E.A.S., C.W. Kan, and A.E. Barron, Sparsely cross-linked "nanogels" for microchannel DNA sequencing. Electrophoresis, 2003. 24(24): p. 4170-4180.			
	C20	Giddings, M.C., J. Severin, M. Westphall, J. Wu, and L.M. Smith, A software system for data analysis in automated DNA sequencing. Genome Research, 1998. 8: p. 644-665.			
	C21	Ewing, B., L. Hillier, M.C. Wendl, and P. Green, <i>Base-calling of automated sequencer traces using Phred</i> . Genome Research, 1998. 8: p. 175-185.			
	C22	Ewing, B. and P. Green, Base-calling of automated sequencer traces using phred. II. Error probabilities. Genome Research, 1998. 8: p. 186-194.			
	C23	Buchholz, B.A. and A.E. Barron, The use of light scattering for precise characterization of polymers for DNA sequencing by capillary electrophoresis. Electrophoresis, 2001. 22: p. 4118-4128.			
	C24	Vazquez, M. et al. Electrophoretic injection within microdevices. <i>Analytical Chemistry</i> 74, 1952-1961 (2002).			
Examiner		Date Considered			
					

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Other Documents

		Other Documents			
Examiner					
Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication			
	C25	Song, H., Tice, J. D. & Ismagilov, R. F. A microfluidic system for controlling			
	ļ	reaction networks in time. Angewandte Chemie-International Edition 42, 768-772			
		(2003).			
	C26	Srinivasan, U., Houston, M. R., Howe, R. T. & Maboudian, R. Alkyltrichlorosilane-			
		based self-assembled monolayer films for stiction reduction in silicon			
		micromachines. Journal of Microelectromechanical Systems 7, 252-260 (1998).			
	C27	Tice, J. D., Song, H., Lyon, A. D. & Ismagilov, R. F. Formation of droplets and			
		mixing in multiphase microfluidics at low values of the Reynolds and the capillary			
		numbers. Langmuir 19, 9127-9133 (2003).			
	C28	Peter C. Simpson, et al., High-throughput genetic analysis using microfabricated 96-			
		sample capillary array electrophoresis microplates, <i>Proc. Natl. Acad. Sci. USA</i> , Vol.			
	C20	95, pp. 2256-2261, March 1998 Biophysics.			
	C29	Pierre J. Obeid, et al., Microfabricated Device for DNA and RNA Amplification by			
		Continuous-Flow Polymerase Chain Reaction and Reverse Transcription-			
		Polymerase Chain Reaction With Cycle Number Selection, <i>Anal. Chem.</i> 2003, Vol. 75, No. 2, January 15, 2003, pp. 288-205			
	C30	75, No. 2, January 15, 2003, pp. 288-295. Nokyoung Park, et al., Cylindrical Compact Thermal-Cycling Device For			
	030				
		Continuous-Flow Polymerase Chain Reaction, <i>Anal. Chem.</i> , Vol. 75, No. 21, November 1, 2003, pp. 6029-6033.			
	C31	Mario Curcio, et al., Continuous Segmented-Flow Polymerase Chain Reaction for			
	C31	High-Throughput Miniaturized DNA Amplification, <i>Anal. Chem.</i> , Vol. 75, No. 1,			
		January 1, 2003, pp. 1-7.			
	C32	Office Action mailed July 2, 2007 in U.S. Appln. No. 10/540,658, filed June 23,			
	CJZ	2005 [UCALP031].			
	C33	Office Action mailed April 27, 2007 in U.S. Appln. No. 11/139,018, filed May 25,			
		2005 [UCALP054].			
	C34	Thorsen et al., "Microfludic Large-Scale Integration", Science, Vol. 298,			
		October 18, 2002, pp.580-584.			
Examiner	J	Date Considered			
Lyammer		Date Considered			

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